STAKHEYEV, B.F., aspirant

Effect of feed grisin on the blood indices of fattening pigs. Veterinariia 40 no.3:55-57 Mr '63. (MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhivotnovodstva.

STAKHEYEV, D.D.; TOBIAS, D.A., kandidat tekhnicheskikh nauk, retsenzent; TAURIT, G.E., inzhener, retsenzent; AVILOV, V.M., redaktor; MODEL', B.I., tekhnicheskiy redaktor

[The assembly line in mass machine production] Potochnaia liniia v massovom mashinostroenii. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1951 202 p. [Microfilm] (MLRA 10:1)
(Machinery industry) (Assembly line methods)

STAKHEYEV, D. D.

Assembly-line methods

"Production line in mass machine construction." Sov. kniga no. 2, '52.

Monthly List of Russian Accessions, Library of Congress, July 1952. Unclassified.

STAKHEYEV, D.D.

USSR/Miscellaneous - Machine Tools

Card : 1/1

Authors : Stakheev, D. D.

Title : About the deficiencies of present technological processes in machining gear wheels.

Periodical : Stan. i instr., 25 (3), 5 - 9, Mar 1954

Abstract : A detailed analysis of the causes of gear wheel displacements is given and a method of broaching is described, which will insure the centricity of the holes. This method was developed at the Stalin Automobile Factory. Diagrams.

Institution : ....

Submitted : ....

32 (2) SOV/112-57-5-10860

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1957, Nr 5, p 183 (USSR)

AUTHOR: Stakheyev, D. D.

TITLE: Experience of Automobile Plant imeni Stalin With Designing and Adopting Automation Means (Opyt raboty avtozavoda im. Stalina po konstruirovaniyu i vnedreniyu sredstv avtomatizatsii)

PERIODICAL: V sb.: Avtomatizatsiya tekhnol. protsessov v mashinostr. Obrabotka metallov rezaniyem i obshchiye vopr. avtomatizatsii. M., 1956, pp 225-239

ABSTRACT: Bibliographic entry.

Card 1/1

STAKHEYEV, D.D.

Tasks of the automobile industry in 1958. Avt. prom. no.1:1-2 Ja '58. (MIRA 11:2)

1. Gosplan SSSR.

(Automobile industry)

STAKHEYEV, D.D.

Automobile industry for the period 1959-1965. Avt.prom. no.1:1-2 Ja '59. (MIRA 12:1)

1. Gosplan SSSR.
(Automobile industry)

STAKHEYEV, D.

New types of motor vehicles in 1959. Avt.transp. 37 no.3:36-37 Mr '59. (MIRA 12:4)

1. Otdel mashinostroyeniya Gosplana SSSR.
(Motor vehicles)

STAKHEYEV, D., inzh.

Development of the automobile industry. Avt.trans. 38 no.8:25-26 Ag '60. (MIRA 13:8)
(Automobile industry)

L 13626-65 AMD
ACCESSION NR: AR4045864 S/0299/64/000/014/M023/M023

SOURCE: Ref. zh. Biologiya. Svodny*y tom, Abs. 14M151

AUTHOR: Stetsula, V. I.; Stalkheyev, I. A.

TITLE: Primary accretion of bone heterotransplants

CITED SOURCE: Sb. 3 Vses. konferentsiya po peresadke tkaney i organov, 1963. Yerevan, 1963, 459-460

TOPIC TAGS: accretion, bone, transplantation, compression arthrodesis, knee, dogs

TRANSLATION: In experiments on 31 dogs, the accretion of heterotransplants was studied under conditions of compression arthrodesis of the knee joint with the use of a device of G. A. Ilizarov. Spongy or compact bone lamina taken from calves or humans with a 10 to 17 mm thickness and preserved by freezing were used as heterotransplants. A roentgenological and histological analysis (after 16 to 360 days) showed primary bone accretion of the heterotransplant. The use of transplants with considerable

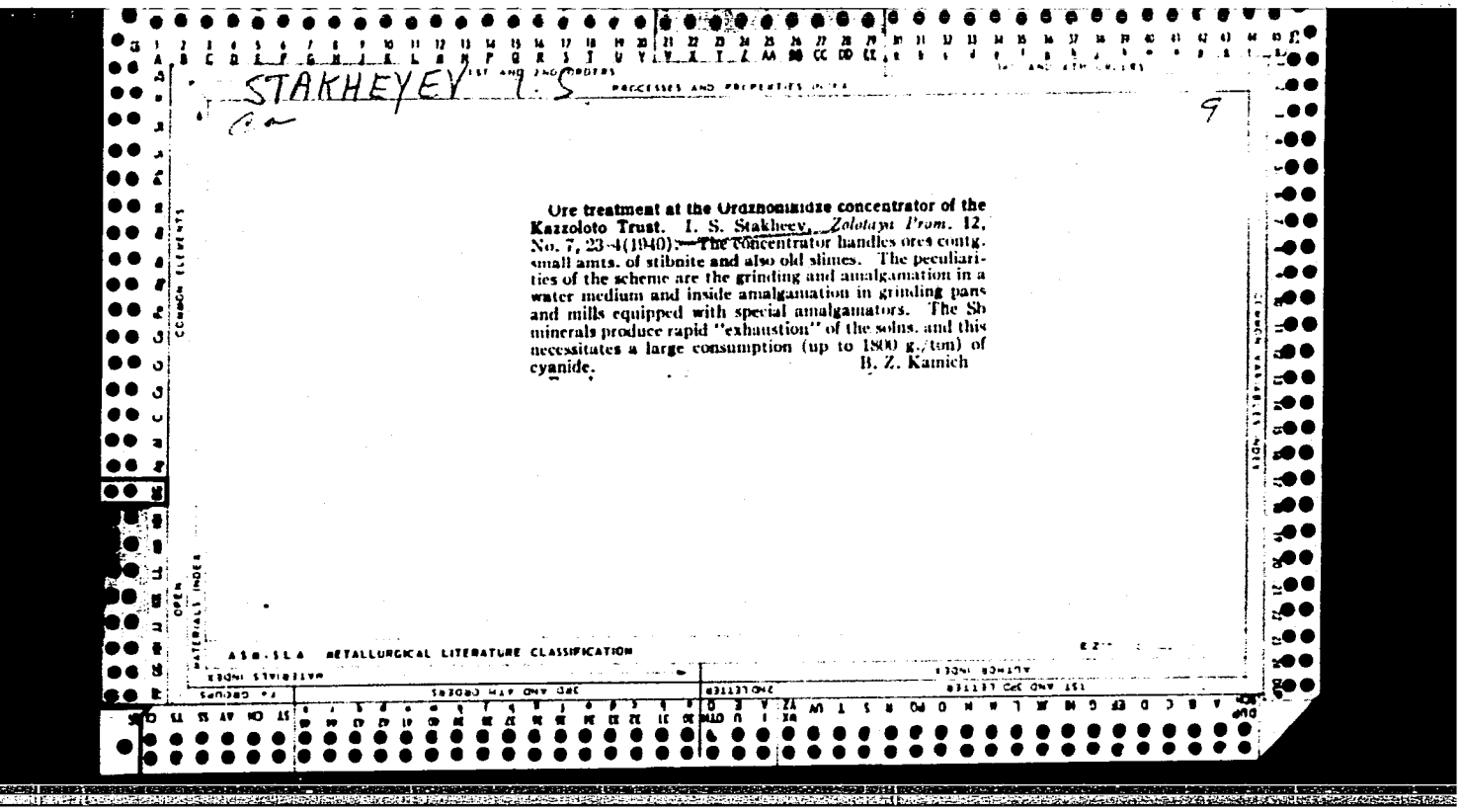
Card 1/2

L 13626-65
ACCESSION NR: AR4045864 O

mechanical durability (thickness 30-40 mm) is recommended to prevent secondary resorption resulting from dynamic loading.

SUB CODE: LS ENCL: 00

Card 2/2



STAKHEYEV I. S.

9

Ore treatment at the Ordzhonikidze concentrator of the Kazzoloto Trust. I. S. Stakheev. *Zolotaya Prom.* 12, No. 7, 23–4(1940).—The concentrator handles ores contg. small amts. of stibnite and also old slimes. The peculiarities of the scheme are the grinding and amalgamation in a water medium and inside amalgamation in grinding pans and mills equipped with special amalgamators. The Sb minerals produce rapid "exhaustion" of the solns. and this necessitates a large consumption (up to 1800 g./ton) of cyanide.

B. Z. Kamich

STAKHEYEV, I. S., ENGINEER

"Kinetics of Cyaniding Gold in the Presence of Oxidized Lead Minerals." Sub 10 Apr 47, Moscow Inst of Nonferrous Metals and Gold imeni M. I. Kalinin

Dissertations presented for degrees in science and engineering in Moscow in 1947.

So: Sum. No. 457, 18 Apr 55

STAKHEYEV, I., gornyy inzhener; FAYNER, I.

For a continuous work organization in stopes. Ugol' 29 no.6:44-48 Je '54. (MLRA 7:6)

1. Shakhta "Chernaya Gora" v Kuzbasse. (Coal mines and mining)

0.0000

SOV/149-60-1-37/37

AUTHOR: Stakheyev, I. S.

TITLE: Scientific Chronicle. The Gold Industry of Ghana (Based on Materials of Mission)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Tsvetnaya metallurgiya, 1960, Nr 1, pp 166-171 (USSR)

ABSTRACT: This article contains information on the gold industry of Ghana, Africa.

Card 1/1

UKRAINSKIY, M.A., st. nauchn. sotr.; MASKEVICH, M.M.; LODEYSHCHIKOV, V.V., kand. tekhn. nauk; SKOBEYEV, I.K., prof., doktor tekhn. nauk; STAKHEYEV, I.S., kand. tekhn. nauk; KULIKOV, A.V., kand. tekhn. nauk; KULIKOVA, S.Ya., kand. geol.-miner. nauk; POKROVSKIY, L.A.; ALEKSANDROVA, N.N.; YELANSKIY, A.N., st. nauchn. sotr.; TROKSKAYA, Z.I.; BANDENOK, L.I., nauchn. sotr.; VERIGO, K.N.; TEMKO, V.P., red.

[Gold mining industry in capitalist countries; technical and economic survey] Zolotodobyvaiushchaia promyshlennost' kapitalisticheskikh stran; tekhniko-ekonomicheskii obzor. Moskva, 1963. 337 p. (MIRA 17:6)

1. TSentral'nyy nauchno-issledovatel'skiy institut informatsii i tekhniko-ekonomicheskikh issledovaniy tsvetnoy metallugii. 2. TSentral'nyy nauchno-issledovatel'skiy institut informatsii i tekhniko-ekonomicheskikh issledovaniy tsvetnoy metallurgii (for Ukrainskiy, Yelanskiy, Verigo).

STRAZHEVICH, I.V., Cand Tech Sci --(diss) "Study of [illegible] during aeration of yeast in an apparatus of the film type." Minsk, 1958. 25 pp (Min of Higher Education USSR. Belorussian Polytech Inst im I.V. Stalin. Chair of Heat and Gas Supply and Ventilation), 100 copies (KL,26-58, 112)

STAKHEYEV, I.V., inzh.

Investigating the mass transfer during the production of baking yeast under conditions of film diffusion. Sbor. nauch. rab. Bel. politekh. inst. no.69:29-50 '58. (MIRA 12:7)
(Mass transfer) (Yeast)

STAKHEYEV, I.V.

Determining the coefficient of moisture exchange during the aeration of a yeast suspension in a film-type apparatus. Sbor.nauch.trud. Bel.politekh.inst. no.87:39-44 '59. (MIRA 14:4)
(Yeast)

KHAZANOV, V.I.; STAKHEYEVA, S.A.; KOZ'MINA, G.V.

Interaction between sodium aluminate and dicalcium silicate.
Zhur.prikl.khim. 38 no.6:1381-1383 Je '65.
(MIRA 18:10)

S/137/62/000/004/191/201
A154/A101

AUTHOR: Stakheyev, Yu. I.

TITLE: Use of photoelectric registration methods in the spectral analysis of ores

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1962, 2, abstract 4K10 ("Nekotoryye vopr. emission. i molekulyarn. spektroskopii", Krasnoyarsk. 1960, 115-120)

TEXT: A method has been worked out for determining Li and In in ores. A spectral instrument based on СТ-7 (ST-7) stylometer, has been built for analyzing Li, that permits subdividing the analyzed light into 2 beams, - an analytic line and a comparison line. Assay is introduced into discharger by air jet. The arc's current is 15a. The error in one measurement is 2.5%. In is determined with the aid of a spectral instrument fitted with КС -55 (KS-55) glass optics. When determining small amounts of In, the background of continuous spectrum was taken into account with the aid of a registering circuit in a photoelectric apparatus. In this circuit the continuously-varying light intensity

Card 1/2

Use of photoelectric registration ...

is transduced into a discretely changing number of pulses, the number of which can serve as a criterion for the registered intensity of light.

L. Vorob'yeva

[Abstracter's note: Complete translation]

STAKHEYEV, Yu.I.

Atomic emission spectrum analysis from the standpoint of the theory of information. Zav.lab. 28 no.7:831-835 '62. (MIRA 15:6)
(Spectrum analysis)

LOSEV, N.F.; SMAGUNOVA, A.N.; STAKHEYEV, Yu.I.

Modern methods of X-ray spectral fluorescence analysis (survey).
Zav.lab. 30 no.4:420-425 '64. (MIRA 17:4)

RAYKHBAUM, Ya.D.; STAKHEYEV, Yu.I.

Scintillation-spectral method of mineralogical analysis. Zhur. anal. khim. 20 no.3:299-304 '65. (MIRA 18:5)

1. Institut geokhimii i analiticheskoy khimii imeni Vernadskogo AN SSSR, Moskva.

KHAZANOV, Ye.I.; KUZ'MINA, G.V.; STAKHEYEVA, S.A.; SHUL'TS, B.V.

Changes in the phase composition of clays during heating in a neutral atmosphere in the presence of a solid reducing agent. Trudy Vost.-Sib. fil. AN SSSR no.43:69-76 '62. (MIRA 16:3)
(Aluminum oxide) (Clay) (Phase rule and equilibrium)

S/897/62/000/043/001/001
B117/B186

AUTHORS: Khazanov, Ye. I., Safonova, Ye. G., Stakheyeva, S. A., Kuz'mina, G. V.

TITLE: Reaction of aluminum carbide with magnesium oxide

SOURCE: Akademiya nauk SSSR. Vostochno-Sibirskiy filial. Trudy. no.43. 1962. Syr'yevyye resursy legkikh metalliv Vostochnoy Sibiri. v. 4, 112-128

TEXT: The reduction of magnesium oxide with aluminum carbide was studied both in theory and practice. The carbide was produced by heating metallic aluminum and electrode graphite, parts by weight ratio 2 : 1, for 3 hrs in the presence of 5% cryolite at 1350 - 1400°C in a hydrogen stream (5 l/hr). After treatment of the reaction products with 0.5 N HCl solution in the cold and increasing the hydrogen stream to 10 l/hr, the Al_4C_3 content rose from 50% to 73 - 90%. Magnesium oxide reacted rapidly with Al_4C_3 on heating in vacuo in a special apparatus at a temperature as low as 900°C, forming metallic magnesium, carbon black, and spinel:

Card 1/2

S/897/62/000/043/001/001
B117/B186

Reaction of aluminum carbide with ...

$$8MgO + Al_4C_3 = 6\ Mg + 2(MgO \cdot Al_2O_3) + 3C$$

The magnesium yield, being ~7 - 10% increased with elevated temperatures, reaching 81-86% at 1200-1300°C. In the presence of calcium oxide $MgO + Al_4C_3$ yielded pentacalcium trialuminate:

$$9MgO + 1.5\ Al_4C_3 + 5CaO = 9\ Mg + 5CaO \cdot 3Al_2O_3 + 4.5C.$$

The magnesium yield was shown to increase by an excess of reducing agent, MgO, or CaO. An addition of calcium fluoride accelerated the reaction between MgO and Al_4O_3. There are 8 figures and 8 tables.

Card 2/2

S/080/63/036/002/002/019
D403/D307

AUTHORS: Khazanov, Ye. I., Safonova, Ye. G., Stakheyeva, S. A. and Kuzmina, G. V.

TITLE: The interaction of aluminum carbide with magnesium oxide

PERIODICAL: Zhurnal prikladnoy khimii, v. 36, no. 2, 1963, 251-263

TEXT: A brief review is first given of the physical and chemical properties of Al_4C_3. In the present work the authors prepared this compound by a number of methods, the best being the interaction of Al with electrode graphite, in the presence of cryolite, at 1350 - 1400°C, over 3 hours, under H_2. The mixture was then treated with HCl. The product was reacted with pure MgO, under vacuum, at 800 - 1300°C. The reaction

$$9MgO + Al_4C_3 = 6Mg + 2(MgO \cdot Al_2O_3) + 3O$$

Card 1/2

S/080/63/036/002/002/019
D403/D307

The interaction of ...

proceeded appreciably at 800°C, fairly rapidly at 900°C (yield of Mg ~7 - 10%), and rapidly at 1200 - 1300°C (81 - 86% Mg). Small additions of CaF_2 accelerated the reaction. The products were confirmed by petrographic, chemical and x ray analyses. In the presence of lime, the reaction was found to be

$$9MgO + 1.5Al_4C_3 + 5CaO = 9Mg + 5CaO.3Al_2O_3 + 4.5C.$$

There are 6 figures and 8 tables.

SUBMITTED: July 22, 1961

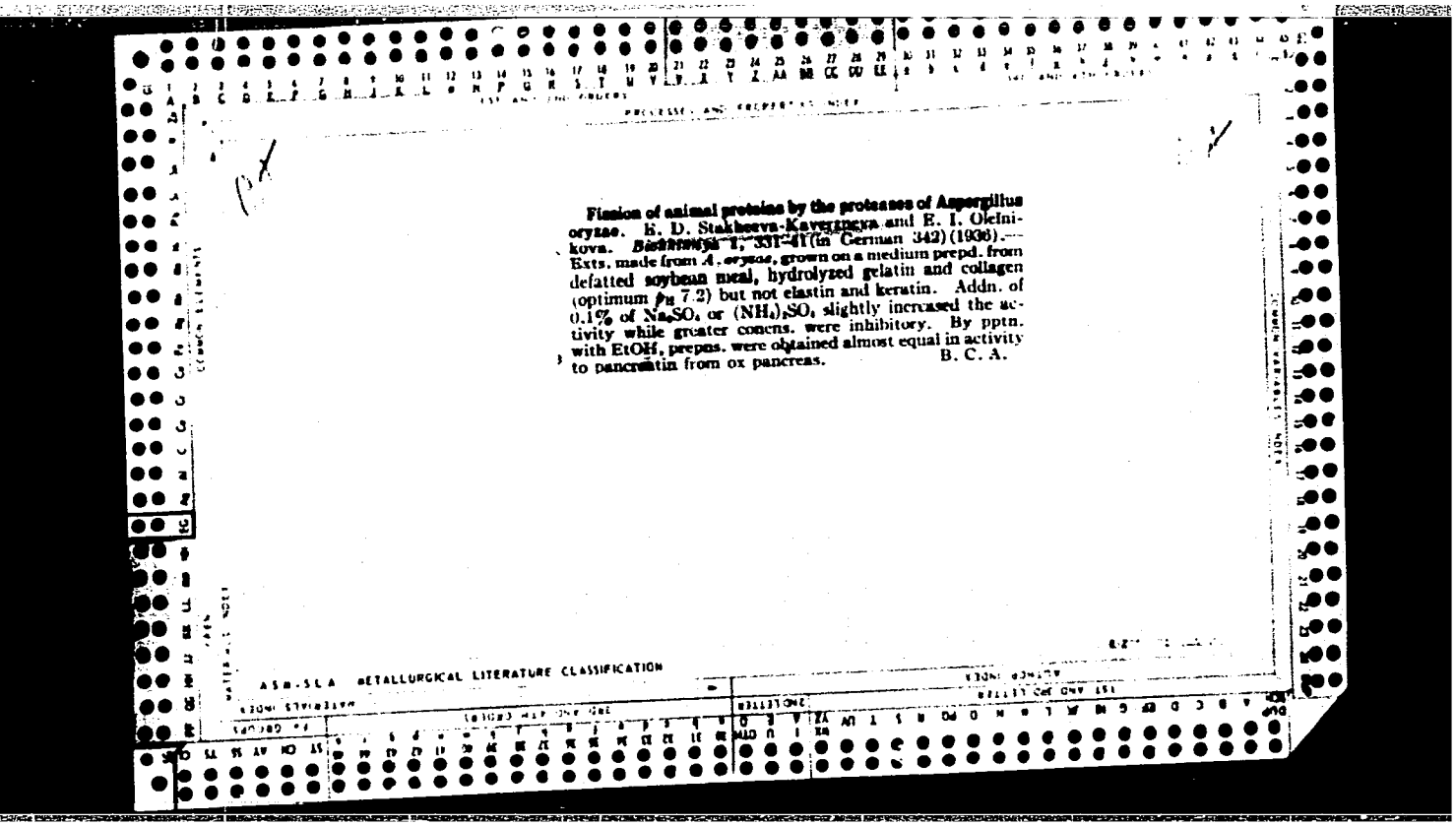
Card 2/2

PROCESSES AND PROPERTIES INDEX

Proteolytic enzymes of the soybean. E. D. Stakheeva-Kaverzneva and E. I. Olefnikova. *Biokhimiya* 1, 321-9 (in German 329-30) (1936).—Exts. of resting and germinating soybeans are equally active in reducing η of aq. gelatin, but while the exts. from the resting seeds show little or no proteolytic activity, those from the germinating seeds are much more active. During germination, the proteases of the seeds remain relatively const., but the peptidases increase. With peptone as substrate, the activity of the protease is optimum at p_H 7.0, and with gelatin and collagen (I) at 7.2-7.4. The small activity at acid p_H and the absence of any activating action by KCN and Na_2S, indicate a low content of cathepsin (sepd. by adsorption on kaolin). Notwithstanding the specificity of plant proteases, the proteolytic enzymes of the germinating beans rapidly dissolve powd. I.

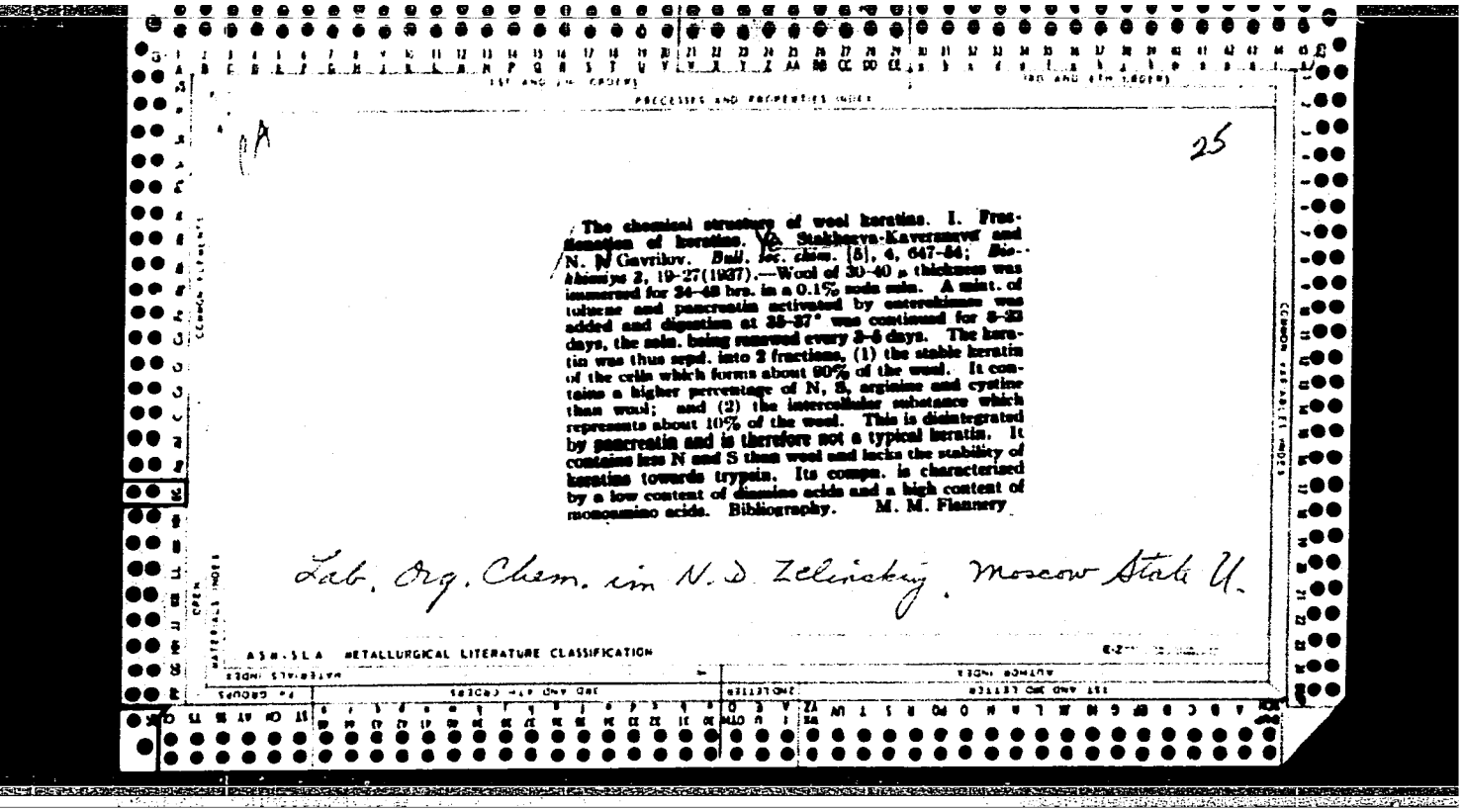
B. C. A.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Fission of animal proteins by the proteases of Aspergillus oryzae. E. D. Stakheeva-Kavergneva and E. I. Okinikova. *Biokhimiya* 1, 331-41 (in German 342) (1936).—Exts. made from *A. oryzae*, grown on a medium prepd. from defatted soybean meal, hydrolyzed gelatin and collagen (optimum p_H 7.2) but not elastin and keratin. Addn. of 0.1% of Na_2SO_4 or $(NH_4)_2SO_4$ slightly increased the activity while greater concns. were inhibitory. By pptn. with EtOH, prepns. were obtained almost equal in activity to pancreatin from ox pancreas. B. C. A.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX

25

The chemical structure of wool keratins. I. Fractionation of keratins. Va. Stakheeva-Kaverznev and N. N. Gavriluv. *Bull. Soc. chim.* [5], 4, 647-54; *Biokhimiya* 2, 19-27(1937).—Wool of 30-40 μ thickness was immersed for 24-48 hrs. in a 0.1% soda soln. A mixt. of toluene and pancreatin activated by enterokinase was added and digestion at 35-37° was continued for 8-23 days, the soln. being renewed every 3-6 days. The keratin was thus sepd. into 2 fractions, (1) the stable keratin of the cells which forms about 90% of the wool. It contains a higher percentage of N, S, arginine and cystine than wool; and (2) the intercellular substance which represents about 10% of the wool. This is disintegrated by pancreatin and is therefore not a typical keratin. It contains less N and S than wool and lacks the stability of keratins towards trypsin. Its compn. is characterized by a low content of diamino acids and a high content of monoamino acids. Bibliography. M. M. Flannery

Lab. Org. Chem. im N. D. Zelinsky, Moscow State U.

A.S.M.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

STAKHEYEVA-KAVERZNEVA, Ye. D.

"On the Fermentability of the Simplest Diketopiperazines," Biokhim, 4, No. 2, 1939.
From the Laboratory of Protein Chemistry, VIEM. Moscow, -1939-.

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

Ca

7

Estimation of leucine and valine by the Fromageot and Heitz method. E. D. Makheeva-Kaverzneva. *Biokhimiya* 5, 513-20(1940).—The method of Fromageot and Heitz (*C. A.* 33, 9201?), which is based on the oxidation of valine and leucine by CrO_3 to Me_2CO and coupling with salicylaldehyde, is accurate when only one of the amino acids is present in pure soln. The method cannot be applied when both valine and leucine are present, or in protein hydrolyzates, even after fractionation of the Cu salts.

H. Priestley

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

STAKHEYEVA-KAVERZNEVA, YE. D.

"I. A Study of the Conditions of Hydrolysis of Serum Albumin," Zhur. Obshch. Khim., 13, No. 6, 1943. Lab. Chem. Albumin, All-Union Inst. Exptl., Med. im. A. M. Gor'k, -1942-.

STAKHEYEVA-KAVERZNEV, E. D.

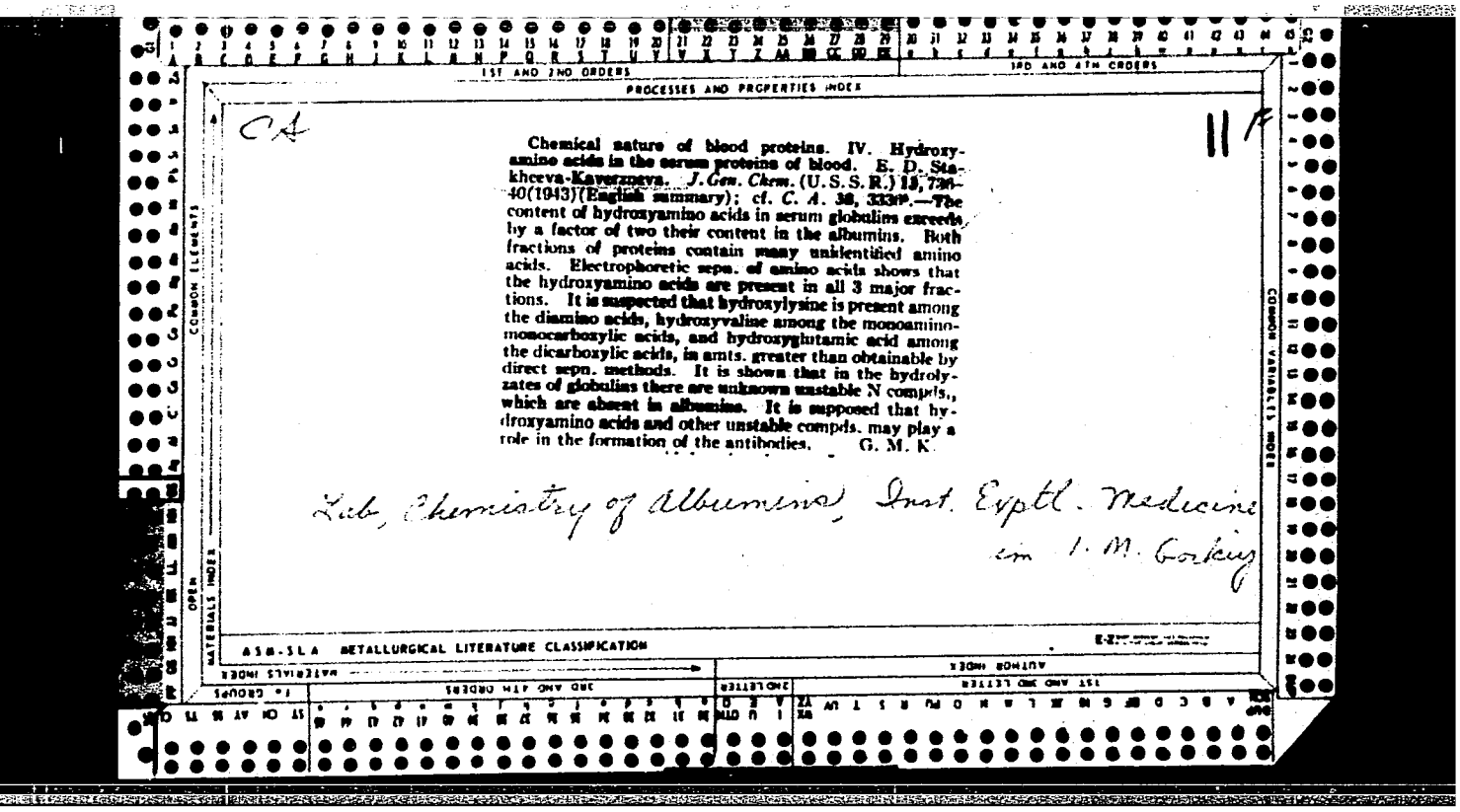
"II. The Composition of Amino-Acids in Blood Albumins"., Stakheyeva-Kaverznev, E. D. (p. 423)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1943, Volume 13, no. 6.

STAKHEYEVA-KAVERZNEV, E. D.

"III. Aldehydes in the Acid Hydrolysis of Serum Albumin". Stakheyeva-Kaverznev, E. D. (p. 427)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1943, Volume 13, no. 6.



PROCESSES AND PROPERTIES INDEX

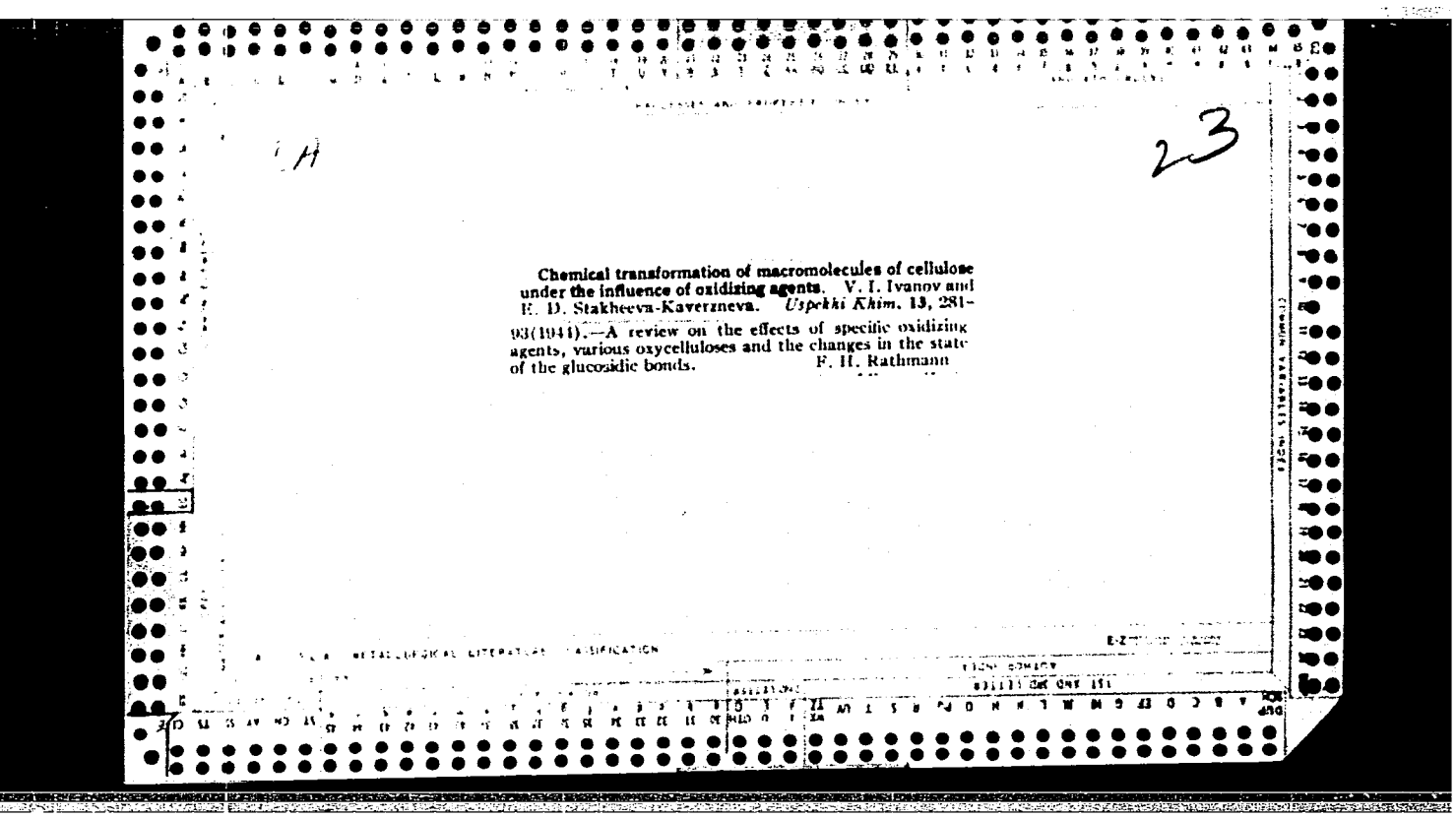
CA

11 F

Chemical nature of blood proteins. IV. Hydroxyamino acids in the serum proteins of blood. E. D. Stakheeva-Kaverznova. *J. Gen. Chem.* (U.S.S.R.) 13, 730-40(1943)(English summary); cf. *C. A.* 38, 3338⁹.—The content of hydroxyamino acids in serum globulins exceeds, by a factor of two their content in the albumins. Both fractions of proteins contain many unidentified amino acids. Electrophoretic sepn. of amino acids shows that the hydroxyamino acids are present in all 3 major fractions. It is suspected that hydroxylysine is present among the diamino acids, hydroxyvaline among the monoamino-monocarboxylic acids, and hydroxyglutamic acid among the dicarboxylic acids, in amts. greater than obtainable by direct sepn. methods. It is shown that in the hydrolyzates of globulins there are unknown unstable N compds., which are absent in albumins. It is supposed that hydroxyamino acids and other unstable compds. may play a role in the formation of the antibodies. G. M. K.

Lab. Chemistry of Albumins, Inst. Exptl. Medicine im. I. M. Gorkiy

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



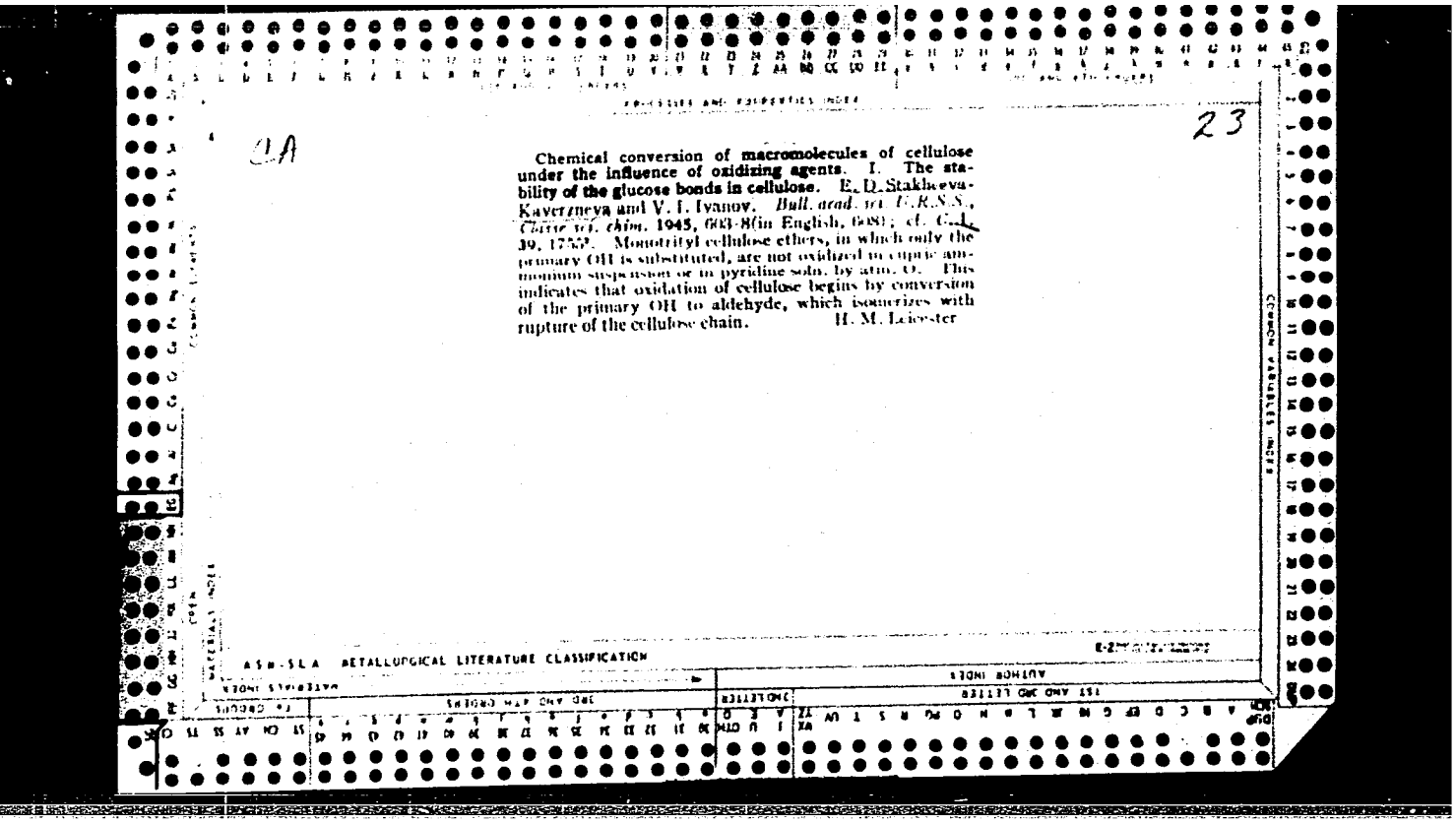
Chemical transformation of macromolecules of cellulose under the influence of oxidizing agents. V. I. Ivanov and E. D. Stakheeva-Kaverzneva. *Uspekhi Khim.* 13, 281–93(1944).—A review on the effects of specific oxidizing agents, various oxycelluloses and the changes in the state of the glucosidic bonds. F. H. Rathmann

CA

23

Atmospheric oxidation of cellulose in ammoniacal copper solution. V. I. Ivanov and E. D. Stakheeva-Kaverzneva. *Bull. acad. sci. U.R.S.S., Classe sci. chim.* 1945, 402-600; cf. *C.A.* **40**, 3884[a].—The lowering of the η of cupro-ammoniacal cellulose solns. on keeping is due to reaction with atm. O resulting in oxidation of the CH_2OH group in the glucose residues to CHO and CO_2H. This, in turn, lowers the resistance of the glucoside links to bases. The velocity of the reaction increases rapidly with temp. and, in addn. to depolarization, H_2O-sol. degradation products of low mol. wt. are produced. These amount to 8% after keeping 200 hrs. at 10-15°, and to 25% after 5 hrs. at 30°, and contain 1% of HCO_2H, AcOH, and CO_2, and ~30% of uronic acids. The reaction mechanism is discussed. B. A.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



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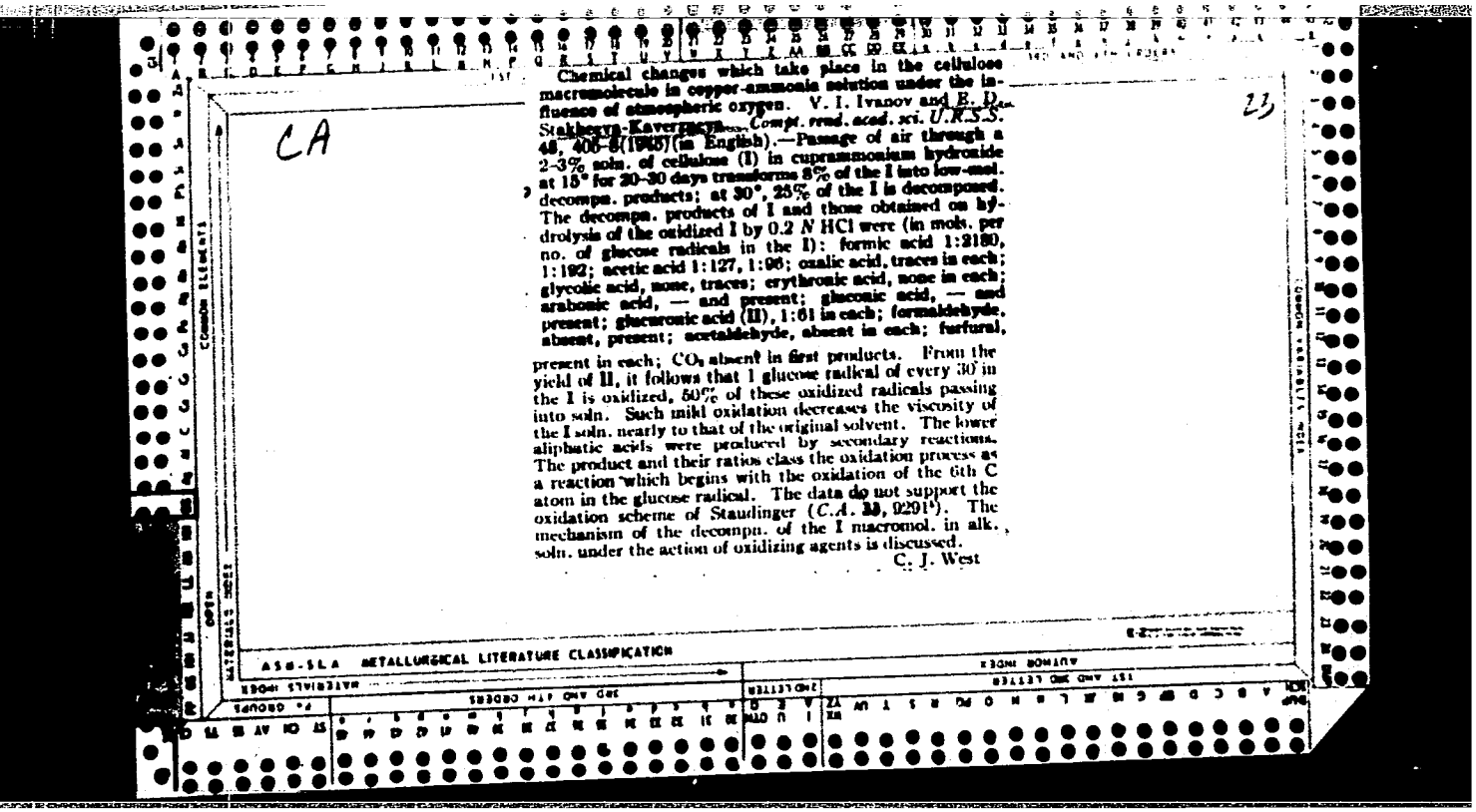
Chemical conversion of macromolecules of cellulose under the influence of oxidizing agents. I. The stability of the glucose bonds in cellulose. E. D. Stakheeva-Kavertneva and V. I. Ivanov. *Bull. acad. sci. U.R.S.S., Classe sci. chim.* 1945, 663-8(in English, 668); cf. *C.A.* 39, 1753⁹. Monotrityl cellulose ethers, in which only the primary OH is substituted, are not oxidized in cupric ammonium suspension or in pyridine soln. by atm. O. This indicates that oxidation of cellulose begins by conversion of the primary OH to aldehyde, which isomerizes with rupture of the cellulose chain. H. M. Leicester

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



CA

23

Chemical changes which take place in the cellulose macromolecule in copper-ammonia solution under the influence of atmospheric oxygen. V. I. Ivanov and E. D. Stakheeva-Kavergina. *Compt. rend. acad. sci. U.R.S.S.* 48, 406-8(1945)(in English).—Passage of air through a 2–3% soln. of cellulose (I) in cuprammonium hydroxide at 15° for 20–30 days transforms 8% of the I into low-mol. decompn. products; at 30°, 25% of the I is decomposed. The decompn. products of I and those obtained on hydrolysis of the oxidized I by 0.2 *N* HCl were (in mols. per no. of glucose radicals in the I): formic acid 1:2180, 1:192; acetic acid 1:127, 1:96; oxalic acid, traces in each; glycolic acid, none, traces; erythronic acid, none in each; arabonic acid, — and present; gluconic acid, — and present; glucuronic acid (II), 1:61 in each; formaldehyde, absent, present; acetaldehyde, absent in each; furfural, present in each; CO_2 absent in first products. From the yield of II, it follows that 1 glucose radical of every 30 in the I is oxidized, 50% of these oxidized radicals passing into soln. Such mild oxidation decreases the viscosity of the I soln. nearly to that of the original solvent. The lower aliphatic acids were produced by secondary reactions. The product and their ratios class the oxidation process as a reaction which begins with the oxidation of the 6th C atom in the glucose radical. The data do not support the oxidation scheme of Staudinger (*C.A.* **30**, 9291[1]). The mechanism of the decompn. of the I macromol. in alk. soln. under the action of oxidizing agents is discussed.

C. J. West

CA

Synthesis of 6-desoxycellulose. E. D. Stakheeva-Kaverzneva, V. I. Ivanov, and A. S. Salova. *Izvest. Akad. Nauk, Otdel. Khim. Nauk* 1949, 369-78.—6-Desoxycellulose was prepd. via tosylcellulose, iodotosylcellulose, unsatd. desoxycellulose; the products contained 0.35-0.55 moles reduced primary HO groups per glucose residue. Linters (3 g.) reptd. from cuprammonium soln., washed and dried by 5 changes of pyridine (3 days), treated in 25 ml. pyridine with 22.8 g. p-$MeC_6H_4SO_2Cl$ in pyridine and let stand at 15° gave a series of products; for substantially mono-substitution the reaction must be stopped before a homogeneous mass forms (10-20 hrs.), by treatment with aq. Me_2CO at 0°; washing and extn. with Me_2CO or MeOH yielded 7 g. powdery product contg. 0.8-0.82 mole of ester groups on primary OH groups and 0.2-0.18 on secondary HO groups; for complete substitution of primary HO it is necessary to continue the reaction until total esterification reaches 1.5-1.88 ester moles per glucose unit, at which point the products become sol. in pyridine and Me_2CO. The tosyl deriv. (0.8 g.), 0.8 g. NaI and 10 ml. dry Me_2CO, heated in a sealed tube 1-4 hrs. at 110-20°, then washed with H_2O give 80-90% iodo deriv., yellowish powder, which either is insol. in AcOH, EtOH, and dioxane, if the tosyl content is about 0.16 mole per 2 glucose units with 0.75 atom I, or insol. in AcOH and EtOH when the compn. is approx. 1:1:1 (from tosyl deriv. contg. 1.88 tosyl residues per 1.12 glucose). The tosyl group was best removed by shaking 1 g. of iodotosylcellulose with 80-100 ml. dry piperidine, letting stand 3 days, filtering, dilg. with water, centrifuging, and reptg. the product from 5% AcOH by addn. of alkali to neutrality; the resulting unsatd. desoxycellulose is an amorphous, colorless powder, rapidly decolorizing $KMnO_4$ and Br; 2 analyzed products gave the following values: $(C_6H_7O_2)_{[illegible]}(C_6H_{10}O_5)_{[illegible]}(OH)_{[illegible]}(tosyl)_{[illegible]}(iodine)_{[illegible]}(piperidine)_{[illegible]}$ and (coeffs. as above) 0.1, 0.6, 2.10, 0.15, 0.014, 0.23, resp.; the products thus had 0.80 to 0.5 double bond per glucose unit. Reduction by Zn-AcOH or catalytic reduction by Pd in AcOH or dioxan proceeded readily; in the second method destructive hydrogenation appeared to occur also, giving low-mol. products. Reduction of iodotosylcellulose by Na-piperidine gave a product still contg. 0.4 double bond per glucose; Zn-AcOH reduction of the iodotosyl deriv., followed by Na-Hg detosylation, gave a low-mol. product contg. 0.20 tosyl unit per 1.86 glucose units and yielding only 67.7% rhamnose; catalytic reduction of unsatd. desoxycellulose by Pd-$BaSO_4$ in AcOH left 0.1 double bond per glucose unit, with some residual tosyl, iodine, and piperidine groups, the product again being of low mol. wt.

G. M. Kosolapoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Ketone groups in oxidized molecule of cellulose. K. D. Stakheeva-Kaverzneva. *Doklady Akad. Nauk S.S.S.R.* 68, 865-7(1949).—"Oxycellulose" prepd. by different procedures was analyzed for total carbonyl content by the hydroxylamine method, while the aldehyde detn. by controlled iodometric procedure (Martin, *et al.*, *C.A.* 36, 6618), gave by difference the content of ketonic CO groups. All "oxycelluloses" except that prepd. by $NaIO_4$ had some keto groups. The following results (in %) were obtained: purified cotton 0.04% CO_2H and 0.01% keto groups, cotton oxidized by HOCl at pH 4.6 0.21 and 0.34, oxidized at pH 6.8, 0.21 and 0.22, oxidized at pH 11 0.18 and 0.21, oxidized moderately at pH 9, 0.34, and 0.40, oxidized extensively at pH 9 1.2 and 0.62, oxidized by NO_2 1.53 and 0.56, oxidized by H_2O_2 in 8% NaOH 0.22 and 0.14, same in 2% NaOH 0.21 and 0.09, oxidized by H_2O_2-$FeSO_4$ in neutral medium 0.32 and 0.2, oxidized by neutral $NaIO_4$ soln. 2.66 and nearly 0% (traces), oxidized by CrO_3 in acid soln. 1.12 and 0.4, resp.

G. M. Kosolapoff

CA

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Chemical changes of cellulose macromolecule under action of oxidizing agents. IV. Lactone links in the macromolecule of oxycellulose and their effect on determination of carbonyl groups by condensation with hydroxylamine. E. D. Stakheeva-Kaverzneva and A. S. Schova. *Izvest. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1951, 782-90; cf. C.A. 40, 5241; 44, 1257. Oxycellulose specimens prepd. by various means of oxidation: NaOCl, peroxide, HIO_4, an oxidation in cupr-ammonium soln. gave a pink color when treated with hydroxylamine at pH 7.5 St., washed with 0.1% HCl and treated with a few drops of $FeCl_3$ soln., this indicates ester linkage in all such specimens, such as would be afforded by lactone formation. If the oxycellulose is pretreated with 0.05 *N* NaOH the reaction does not appear. The formation of hydroxamic acids (color test above) occurs slowly even at pH 5 to but not at pH 3. Reduction of the oxycellulose thus treated with hydroxylamine either by Ca and H_2O, Ca, H_2O, and dioxane, Zn and HCl, or electrolytically (all in the cold) gave products contg. primary NH_2 groups which confirms the presence of ketone groups in oxycellulose. NH_3 was evolved during reduction, indicating the decompn. of acid amides formed from reduction of hydroxamic acid groups. Since the lactone groups react with hydroxylamine under conditions that are generally used for detn. of carbonyl groups by this reagent, the results obtained are higher than theoretical. V. **Proof of existence of α-hydroxymonoketone groups in oxycellulose.** E. D. Stakheeva-Kaverzneva. *Ibid.* 791-4.—Oxycellulose specimens oxidized by NaOCl, H_2O_2, NO_2, or atm. O_2 in cuprammonium soln. possess $CH(OH)\cdot C(O)$ groups, as shown by treatment with phosphotungstic reagent. HIO_4 does not produce such groups in its reaction with cellulose. The hydroxyketo groups isomerize to enediol groups only at pH above 10; hence they do not interfere with the iodometric detn. of aldehyde groups. The blue color test (Benedict, C.A. 16, 2524) was checked on a variety of compds with the α-hydroxyketo linkage. G. M. Kosolapoff

STAKHEEVA-KAVERZNEVA, E.D.

New data on the chemical composition of oxycellulose. E. D. Stakheeva-Kaverzneva. *Doklady Akad. Nauk S.S.S.R.* 78, 481-3(1951); cf. *C.A.* 44, 1257e.—New data are presented as proof of the presence of ketone groups in the oxycellulose as well as indications of the position of these groups in the units of the cellulose macromol. Evidence is presented for the presence of highly unstable lactone bonds within the mol. The presence of such bonds is used to explain certain discrepancies in the literature on oxycellulose.
J. Rovtar Leach

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STAKHEYEVA-KAVERZNEVA, Ye.D.; IVANOV, V.I.; SALOVA, A.S.

Chemical transformations of the macromolecule of cellulose under the action of oxidizing agents. VI. The presence in oxycelluloses of the groupings of carbonic esters and their effect on the determination of uronic carboxylic groups. Bull. Acad. Sci. U.S.S.R., Div. Chem. Sci. '52, 199-204 [Engl. translation].
(CA 47 no.19:10220 '53)

STAKHEYEVA - KAVERZNEVA, Ye. D.

5

Chemical Abst
Vol. 48 No. 9
May 10, 1954
Cellulose and Paper

Chemical transformations of the cellulose macromolecule caused under action of oxidizing agents. VII. Chemical transformations of cellulose during its oxidation by sodium hypochlorite. E. D. Stakheeva-Kaverzneva, V. I. Ivanov, and A. S. Salova. *Bull. Acad. Sci. U.S.S.R., Div. Chem. Sci.* 1952, 681–90 (Engl. translation).—See *C.A.* 47, 850*i*.
H. L. H.

NF
9-17-54

STAKHEYEVA-KAVERZNEVA, Ye.D.

Chemical transformation of the cellulose macromolecule under the action of oxidizing agents. VIII. Chemical changes of cellulose on oxidation with hydrogen peroxide. V. I. Ivanov, E. D. Stakheeva-Kaverzneva, and Z. I. Kuznetsova. *Bull. Acad. Sci. U.S.S.R., Div. Chem. Sci.* 1953, 341-50(Engl. translation).—See *C.A.* 47, 10220*d*.
H. L. H.

(3)

Specific method of determination of carbonyl groups in oxycellulose. E. D. Stakheeva-Kaverzneva and A. S. Salova (Inst. Org. Chem., Acad. Sci. U.S.S.R., Moscow). *Zhur. Anal. Khim.* 8, 365–9(1953).—The interference of lactones (which react with $NH_2OH.HCl$) is prevented in this method by using an alc. soln. instead of an aq. one and by lowering the pH to 3–4. To prep. the reagent dissolve 5 g. of $NH_2OH.HCl$ in 240 ml. of 96% EtOH to which are added 5 ml. H_2O and 6 ml. of 0.2% bromophenol blue soln. (indicator). To this soln. add dropwise 0.2*N* NaOH until the color is green in transmitted and red in reflected light. The pH of this reagent is 3.2–3.4. To 2–3 g. of oxycellulose add 60 ml. of reagent and allow to stand for 2 hrs. Filter and titrate 50 ml. of filtrate with 0.1*N* NaOH to the original color or preferably to pH 3.2. Calc. the CO groups (x) present from $x = 0.3360a/wt.$ of sample, where a is the no. of ml. of 0.1*N* NaOH used in titration. Use fresh reagent for each detn.

M. Hosch

STAKHEYEVA-KAVERZNEVA, Ye.D.; IVANOV, V.I.; SALOVA, A.S.

Chemical transformations in cellulose under the action of hypochlorite.
Bumazh. Prom. 28, No.7, 6-11 '53. (MLRA 6:7)
(CA 47 no.22:12799 '53)

(3)

Hydrogen peroxide bleaching of cellulose. E. D. Stakheeva-Kaverzneva, V. I. Ivanov, and Z. I. Kuznetsova. *Tekstil. Prom.* 14, no. 3, 31–4(1954).—Oxidation processes occurring in cellulose during H_2O_2 bleaching are discussed in detail. The decrease in viscosity (η) of bleached cellulose (detd. in cuprammonium) is dependent on the pH of the bleaching bath since this dets. the nature and the degree of oxidation of the macromol. Neutral medium yields celluloses contg. more aldehydic, ketonic, and dialdehydic groups than the alk. medium; being unstable in strong alkali these groups will considerably lower η. Optimum pH for H_2O_2 bleaching is 8–10; a higher pH favors the enolization of hydroxy ketones and hydroxy aldehydes, resulting in a low η.

Elisabeth Barabash

NF 9-20(-5)

STAKHEYEVA-KAVERZNEVA, Ye.D.

Maths

Chemical transformations of cellulose macromolecules under influence of oxidizing agents. XI. Causes of chemical instability of celluloses oxidized by nitrogen dioxide. E. D. Stakheeva-Kaverzneva and S. A. Kist. *Bull. Acad. Sci. U.S.S.R., Div. Chem. Sci.* 1956, 603-13 (English translation).--See *C.A.* 50, 17426e. B. M. R.

STAKHEYEVA—KAVERZNEVA, Ye. D.

15

Chemical transformations of cellulose in activated hypochlorite oxidation. / E. D. Stakheeva-Kaverzneva, V. I. Ivanov, and G. A. Krylova (N. D. Zelinskii Inst. Org. Chem., Moscow). *Izvest. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1957, 120–2; *cf. C.A.* 47, 850i.—Oxidation of cellulose with NaOCl (0.1*N* at pH 11 at 20° 1–24 hrs.) in the presence of urea as activator (0.025 moles/mole NaOCl) has the same characteristics as does the unactivated oxidation with NaOCl (kinetic curves shown), but the degree of polymerization (mol. wt.) does not change quite so drastically. Possibly the activator serves to oxidize the colored satellites of cellulose rather than cellulose itself.

G. M. Kosolapoff

1. STAKHEYKO, F. G.

2. USSR (600)

4. Elm

7. Sowing elm seeds with alae removed. Les.khoz. 6 No. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

CATEGORY : Forestry. Dendrology.

ABS. JOUR : Ref Zhur -Biologiya, No. 5, 1959, No.20132

AUTHOR : Stakheyko, F.G.

TITLE : Siberian Larch in the Southern Part of the Ukraine.

ORIG. PUB.: Kolgospnik Ukraini, 1958, No.4, 39

ABSTRACT : No abstract

STAKHEYKO, Fedor Grigor'yevich, kand. sel'khoz. nauk; PIS'MENNYY, N.R., red.; CHUGUNOVA, Z.S., red. izd-va; SHIBKOVA, R.Ye., tekhn. red.

[Cultivation of Siberian larch]Razvedenie listvennitsy sibirskoi. Moskva, Goslesbumizdat, 1962. 71 p. (MIRA 15:10)
(Larch)

STAKHI, A.M.

Classes of motions with periods in partially ordered dynamic systems. Dif. urav. 1 no.5:619-624 My '65. (MIRA 18:7)

1. Institut matematiki s Vychislitel'nym tsentrom AN Moldavskoy SSR.

STAKHIRA, I.M. [Stakhyra, I.M.]

Growing of In_2Se single crystals by the method of extraction from the melt. Ukr. fiz. zhur. 8 no.9:970-974 S '63. (MIRA 17:8)

1. Chernovitskiy gosudarstvennyy universitet.

BORETS, A.N. [Borets', O.M.]; STAKHIRA, I.M. [Stakhyra, I.M.]

Self-absorption edge in In_2Se single crystals. Ukr. fiz. zhur. 8 no.9:1026-1027 S '63. (MIRA 17:8)

1. Chernovitskiy gosudarstvennyy universitet.

BORETS, A.N. [Borets', O.M.]; STAKHIRA, I.M. [Stakhyra, I.M.]

Optical properties of In_2Se. Ukr. fiz. zhur. 9 no. 10:1074-1078 O '64 (MIRA 18:1)

1. Chernovitskiy gosudarstvennyy universitet.

L 11616-66 EWT(1)/EWT(m)/EWG(m)/T/EWP(t)/EWP(b) IJP(c) RM/JD/GG
ACC NR: AT6002263 (A) SOURCE CODE: UR/2564/65/006/000/0284/0287

AUTHOR: Stakhira, I. M.

ORG: none

TITLE: Growing of In_2Se single crystals by the Czochralski method [Paper presented at the Third Conference on Crystal Growing held in Moscow from 18 to 25 November, 1963]

SOURCE: AN SSSR. Institut kristallografii. Rost kristallov, v. 6, 1965, 284-287

TOPIC TAGS: indium compound, selenide, single crystal growing

ABSTRACT: A typical apparatus for growing single crystals by the Czochralski method was employed, but some of its parts were modified to correspond to the particular characteristics of the crystallization of In_2Se (control by means of temperature conditions). The alloys used for growing the crystals had to be homogeneous in order to produce satisfactory results. Since the most important factor affecting the single-phase character of the In_2Se crystals is the temperature gradient in the region of crystallization, the Peltier effect was used to achieve the maximum temperature gradients. The conditions of growth were chosen

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ACC NR: AT6002263

on the basis of results of differential thermal analysis. X-ray analysis confirmed the rhombic system of In_2Se. Optical methods established that In_2Se is an anisotropic semiconductor with forbidden zone widths of 0.68 - 0.69 eV in the cleavage plane along the principal directions. The free carrier concentration was estimated to be 10^{14} cm^{-3}. Orig. art. has: 3 figures.

SUB CODE: 20 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 002

Card 2/2

L 57550-65 EWT(l)/EWT(m)/EWG(m)/EEC(t)/EWP(t)/EWP(b) Pz-6 IJP(c) RDW/JD/AT

ACCESSION NR: AP5014579 UR/0181/65/007/006/1777/1782

AUTHOR: Zhad'ko, I. P.; Rashba, E. I.; Romanov, V. A.; Stakhira, I. M.; Tovstyuk, K. D.

TITLE: Anistropy of electric and photoelectric properties of In_2Se

SOURCE: Fizika tverdogo tela, v. 7, no. 6, 1965, 1777-1782

TOPIC TAGS: Dember effect, transverse Dember effect, electron mobility, hole mobility, anisotropic semiconductor

ABSTRACT: A theory of the transverse Dember effect was derived on the basis of the difference in the anisotropy of electron and hole mobility in macroscopic anisotropic semiconductors. The theory attributes the emergences of nonequilibrium carriers at the specimen's rear side to the influence of the field of the transverse photoelectromotive force. In_2Se specimens consisting of single crystals 1 to 3 cm^3 in volume were used to detect experimentally the transverse Dember effect. This material was selected because of its structural anisotropy (the lattice of In_2Se is diamond-shaped (D_{2h}) with parameters a = 4.065 Å, b = 12.24 Å, c = 15.23 Å) and its photosensitivity. The type of conductivity of the specimens was determined from the sign of the thermal emf and the Hall effect, and from the sign of photo

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L 57550-65
ACCESSION NR: AP5014579

emf during illumination of a point tungsten probe. Investigations were made of electron-type specimens with $\rho \sim 10^{-1}$ and $\rho \sim 10^{3}$ ohm·cm and hole-type specimens with $\rho \sim 10^{3}$ ohm·cm. The electron mobility in low ohmic electron-type In_2Se specimens at room temperature was of the order of 500 $cm^2/v \cdot sec$. The hole mobility at room temperature was smaller by at least one order. During illumination of a plate cut out at a 45° angle to the a-axis and containing a b-axis (light beam intensity $\sim 3 \times 10^{15}$ quanta/sec) a photo emf of several millivolts was observed in the direction perpendicular to axis b. A photo emf of the same order was also observed on specimens cut out at a 45° angle to the a-axis but containing a c-axis. No photo emf was observed during the illumination of faces perpendicular to the b-axis. The measured characteristic times for photoconductivity and transverse photo emf coincided and for various n- and p-type specimens were $\tau = 0.1—0.4$ μsec. Thus, at such small τ the contribution to the transverse effect by anisotropic thermal emf caused by the heating of specimens is negligible. Orig. art. has: 13 formulas and 2 figures. [JA]

ASSOCIATION: Institut poluprovodnikov AN UkrSSR, Kiev (Institute of Semiconductors, AN UkrSSR)

SUBMITTED: 08Jan65 ENCL: 00 SUB CODE: SS, EM
NO REF SOV: 004 OTHER: 003 ATD PRESS: 4037

Card 2/2

L 16368-65 EWT(m)/EWP(t)/EWP(b) IJP(c)/ESD(t)/SSD/AFWL/ASD(a)-5/AS(mp)-2/
RAEM(a) RDW/JD
ACCESSION NR: AP4048864 S/0185/64/009/010/1074/1078

AUTHOR: Borets', O. M.(Borets, A. N.); Stakhira, I. M. (Stakhira, I. M.)

TITLE: Optical properties of In_2Se

SOURCE: Ukrayinsk'ky*y fizy*chny*y zhurnal., v. 9, no. 10, 1964, 1074-1078

TOPIC TAGS: In_2Se, optical property, crystal orientation, refractive index, indium selenide

ABSTRACT: The anisotropy of the optical properties of In_2Se single crystals was investigated. The orientation of the crystals was determined by x-ray analysis and by infrared polarized radiation, based on the aniostropy on the absorption edge. The spallation surfaces and polished surfaces of the samples were examined. A distinct interference pattern with beats was observed in unpolarized and polarized radiation where the electric vector did not coincide with any of the basic crystallographic directions. This was explained by the optical biaxiality of the In_2Se crystal. The two principal refractive indices were determined. A depend-

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ence between the absorption coefficients and the photon energy at room temperature for the three basic crystallographic directions was noted. A characteristic shape of the absorption edge with a break in the curve was obtained for the two basic crystallographic directions in the spallation plane. There was no such break when the electric vector was directed along the normal to the spallation plane. Transmission curves of 90 micron thick samples are presented for the three orientations of the crystal with respect to the electric vector. Temperature measurements indicated a complex mechanism of the basic transitions, but the complexity of the absorption edges made it impossible to interpret the nature of the basic transitions. "The authors thank K. D. Tovstyuk and P. A. Kotsyumas for advice and interest in the work and T. S. Gertovy*ch for assisting in the investigation." Orig. art. has: 7 figures and 1 equation

ASSOCIATION: Chernivyets'ky*y derzhuniversy*tet (Chernivyets State University)

SUBMITTED: 01Nov63 ENCL: 00

SUB CODE: GP, IC NO REF SOV: 003 OTHER: 001

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652810017-0"

STAKHIYA, Ya. P.

Machine for rolling disk saws. Der. prom. 14 no.2:28 F '65.
(MIRA 18:6)

STAKHIYEV, Yu.M.; VARLAMOV, Yu.F.

Plane saw designed by A.P. Den'kach. Der. prom. 13 no.12:
28-29 D '64 (MIRA 18:2)

STAKHIYEV, Yu.M.

Removing bottom rolls of saw frames. Der.prom. 8 no.1:26 Ja '59. (MIRA 12:1)

1. Engel'skiy lesopil'nyy zavod.
(Sawmills)

STAKHIYEV, Yu.M.

Forming framed-saw teeth on the PV-5 rolling mill. Der.prom. 8 no.3:20 Mr '59. (MIRA 12:4)

1. Engel'skiy lesozavod.
(Rolling (Metalwork)) (Saws)

STAKHIYEV, Yuriy Mikhaylovich; GOLUBEVA, T.M., red.; SHILLING, V.A., red. izd-va; BELOGUROVA, I.A., tekhn. red.

[Finishing sawing of lumber with circular saws without widening the toothed rim] Chistovaia raspilovka drevesiny kruglymi pilami bez ushireniia rezhushchego ventsa. Leningrad, 1961. 20 p. (Leningradskii Dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Derevoobrabatyvaiushchaia promyshlennost', no.3)
(MIRA 14:11)

(Sawing)

STAKHNEVICH, V.L., inzh.; ZADUNAYSKIY, Ya.N., inzh.

Work of the institute "Giprotorfrazvedka" in the prospecting of peat resources and designing of peat enterprises. Zbor. st.po izuch. torf.fonda no.2:5-14 '57. (MIRA 11:8)

1.Institut "Giprotorfrazvedka."
(Peat)

CARD COPY : Microbiology. Microbes Pathogenic for Man and Animals. Anaerobic Bacilli

ABS. JOUR. : RZBiol., No. 3 1959, No. 10261

AUTHOR : Segal', M. S., Stakhnovskaya, G. K.

INST. : ---

TITLE : Seeding of Soils with Spores and with the Tetanus Bacillus and the Tetanus Morbidity

ORIG. PUB. : Vsb.: Anaerobnyye infektsii. Kiev, Gosmedizdat UkrSSR, 1957, 85-86

ABSTRACT : 250 samples of earth were investigated by a biologic test on mice. When spores and bacilli of tetanus were present in them the infected mice developed muscular rigidity, contractures and convulsions on the 1st-3rd day, and the animals died. The percentage of positive findings ranged from 40 to 88, and in certain regions amounted to 100. A high degree of seeding of the soil was found in the region of irrigation fields. The specificity of the disease was checked by the injection of 10 antitoxic units

CARD: 1/3

54

SHEYNBAUM, B.M.; CHERNYSHEVA, P.I.; KOVTUNOVA, N.Ya.; YAKHNIS, Z.E.; STAKHO, A.S.; POMOMAREVA, T.D.

Duration of the usefulness of sterile solutions prepared in the pharmacy. Apt. delo 11 no.1:55-56 Ja-F '62. (MIRA 15:4)

1. Apteka Sochinskoy gorodskoy bol'nitsy No.2 i bakteriologicheskaya Laboratoriya Sochinskoy sanitarno-epidemiologicheskoy stantsii.
(SOLUTIONS (PHARMACY))

STAKHOBIDDINOV, S. S.

"Poisonous plants of the Fergan Valley"
Tashken. 1951. 32 pages with illustrations.
SO: Vet., May 1952, Unclassified.

Publication of the Academy of Sciences, Uzbek SSR, 1951. In Uzbek Language.
A pamphlet to assist livestock breeders.

STAKHORSKAYA, L.K.; TOKAREV, B.I.

Effect of hydroxymethylfuraldehyde on yeast. Mikrobiologiia 33 no.6:1056-1060 N-D '64. (MIRA 18:4)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut gidroliznoy i sul'fitno-spirtovoy promyshlennosti, Leningrad.

STAKHORSKAYA, L.K.

Improving the biological quality of the hydrolyzates of [illegible] cellulose. Gidroliz. i lesokhim.prom. 18 no.1:6-7 '65. (MIRA 18:3)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut gidroliznoy i sul'fitno-spirtovoy promyshlennosti.

ARISTOVSKAYA, T.V.; STAKHORSKAYA, L.K.

Nitrogen nutrition of bacteria of the dysenteric group; author's abstract. Zhur.mikrobiol.epid.i immun. no.11:43 N '53. (MLRA 7:1)

1. Iz Leningradskogo instituta vaktsii i syvorotok.
(Dysentery) (Nitrogen)

NIKOGOSYAN, I.Kh.; STAKHORSKAYA, L.K.

Study of the alkaloids of the cow parsnip Heracleum dissectum. Trudy Len. khim.-farm. inst. no.17:198-201 '64. (MIRA 18:1)

1. Kafedra farmakognozii i botaniki Leningradskogo khimiko-farmatsevticheskogo instituta.

STAKHORSKAYA, L.K.

Investigating some cow parsnip species used in popular medicine. Trudy Len. khim.-farm. inst. 12:275-283 '61. (MIRA 15:3)

1. Kafedra farmakognozii i botaniki Leningradskogo khimiko-farmatsevticheskogo instituta.
(COW PARSNIP)
(PHARMACOGNOSY)

STAKHORSKAYA, L.K.

Colorimetric method for determining coumarin derivatives. Apt. delo 11 no.2:44-46 Mr-Ap '62. (MIRA 15:5)

1. Leningradskiy khimiko-farmatsevticheskiy institut.
(COUMARIN) (COLORIMETRY)

SEMUSHINA, T.N.; STAKHORSKAYA, L.K.; MONAKHOVA, N.I.

Utilization of various sugars by fodder yeast cultures.
Mikrobiologiia 32 no.5:863-868 S-O'63 (MIRA 17:2)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut gidrolizmoy i sul'fitno-spirtovoy promyshlennosti, Leningrad.

STAKHORSKAYA, L.K.; TOKAREV, B.I.

Effect of the resinous substances of hydrolyzates on yeast propagation. Gidroliz. i lesokhim.prom. 17 no.1:14-15 '64. (MIRA 17:4)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut gidrolizhoy i sul'fitno-spirtovoy promyshlennosti.

STAKHORSKAYA, N. I.

USSR/General Biology - Ecology and Hydrobiology. B-5

Abs Jour : Ref Zhur - Biologiya, No 1, 1957, 246.

Author : A.R. Prendes' and N.I. Stakhorskaya
Inst : Odessa Institute
Title : Hydrobiological and Fishery Economic Characteristics of Ponds in the Forestry Steppe and the Steppe Rayons of Odessa.

Orig Pub : Tr. Odessk. Un-ta, 1955, 145, 155-162.

Abst : Most of the ponds in the forestry-steppe rayons belong to the pond type, and the steppe rayons to the swamp type. Their hydrochemical characteristics, and information on the macrophytes, zooplancton, and "zoobentos" are given. The materials gathered in regard to the feeding of carp with data on a feed base lead to the conclusion of the necessity of taking measures to fertilize the ponds and provide food for the fish. An increase in fish production in the carp fisheries of Odessa Oblast may be achieved by the additional planting of tench and silver Prussian carp.

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PRENDEL', A.R. [Prendel', O.R.], prof.; STAKHORSKAYA, N.I. [Stakhors'ka, N.I.]

Hydrobiological and piscicultural evaluation of collective farm ponds in Odessa Province and outlook for increasing their fish yields. Pratsi Od. un. Ser.biol.nauk no.8(vol.147):115-121 '57. (MIRA 12:4)

(Odessa Province--Fish ponds)

PRENDEL', A.R. [Prendel', O.R.], prof.; KORENCHEVSKAYA, G.O. [Korenchevs'ka, H.O.]; STAKHORSKAYA, N.I. [Stakhors'ka, N.I.]

Materials on a study of the faina, ecology and biology of leeches inhabiting bottom-land waters in the lower Dniester Valley. Pratsi Od. un. Ser.biol.nauk no.8(vol.147):123-125 '57. (MIRA 12:4)
(Dniester Valley--Leeches)

L 23059-65 EWT(d)/EWT(l)/EWP(k)-2/EWA(d)/EWP(v)/EWP(l)/EEC-4/EWA(h) Pz-6/Pn-4/
Pu-5/Paa-2/Pg-4/Peb/Pt-10/Pi-4/Pl-4 JHB/GW/WS

ACCESSION NR: AR5004877 S/0058/64/000/011/H062/H063

66
B

SOURCE: Ref. zh. Fizika, Abs. 11Zh390

AUTHORS: Bel'kovich, O. I.; Stakhov, A. A.

TITLE: Investigation of leading fronts of signals in inclined meteor propagation

CITED SOURCE: Sb. Meteorn. rasprostr. radiovoln. No. 1, Kazan', Kazansk. un-t, 1963, 70-79

TOPIC TAGS: meteoric radio scatter, meteor observation, pulse rise

TRANSLATION: The authors made a statistical analysis of the leading fronts of signals at two frequencies (in the 40 and 60 Mcs bands) reflected from meteor trails, for inclined meteor propagation. A connection is obtained between the average duration of the front and the registration level. It is shown that the average duration of

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ACCESSION NR: AR5004877 0

the signals reflected from meteor trails is proportional to λ^2, whereas the average duration of the leading front is proportional to $\lambda^{1/2}$ and consequently, with decreasing wavelength, the percentage of the time belonging to the leading front of the signals, which is the signal portion useful for information transmission, will increase. Thus, whereas in the 40 Mcs band the leading fronts account for 8--10% of the duty factor, at 100 Mcs the contribution of the leading fronts to the duty factor increases to 40--50%.

SUB CODE: AA, EC ENCL: 00

Card 2/2

MENDELIN, R.S., STAKHOV, A.A.

Automatic reading of high-stability oscillators by standard LSO
in frequency. Izm. tekh. no.9:47-48 S '64. (MIRA 18:9)

L 17962-63 EPF(c)/BDS/EWT(1) AFFTC/ASD Pr-4 CG

ACCESSION NR: AP3003703 S/0048/63/027/007/0947/0948

59

AUTHOR: Zhernovoy, A.I.; Rukhin, A.B.; Stakhov, O.V.

TITLE: Acceleration of polarization of nuclei in nuclear resonance proton probe

SOURCE: AN SSSR, Izvestiya, Ser.fiz.,v.27, no.7, 1963, 947-948

TOPIC TAGS: nuclear magnetic resonance, NMR probe, polarizer

ABSTRACT: The main function of the polarizing system used in conjunction with a flow-through typr nuclear magnetic resonance probe is to provide the maximum possible value of the magnetization vector of the nuclei of the liquid flowing into the coil. The conditions for insuring better than 90% polarization and less than 10% magnetization loss on the way from the polarizer to the probe coil are given in the form of equations in terms of the polarizer volume, the tubing volume and the relaxation time of the nuclei. The significance of these factors is discussed, and it is concluded that to satisfy the above requirements the ratio of the effective volume of the polarizer filled with sand and iron filings to the total volume of the polarizer should be 1 to 6 or better. That is, use of a "well filled" polarizer makes it feasible to reduce the volume of the gap of the polarizing magnet

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L 17962-63

ACCESION NR: AP3003703

and increase the effective field strength. Orig.art.has: 5 formulas.

ASSOCIATION: none

SUBMITTED: 00	DATE ACQ: 02Aug63	ENCL: 00
SUB CODE: SD, PH	NO REF SOV: 0000	OTHER: 000

Card 2/2

L 32832-65 EWT(1) IJP(c)
ACCESSION NR: AP5004542 S/0048/65/029/001/0164/0165

AUTHOR: Zhernovoy, A.I.; Stakhov, O.V.

TITLE: Stabilization of a weak inhomogeneous magnetic field by means of nuclear magnetic resonance /Report, 14th Annual Conference on Nuclear Physics held in Tbilisi 14-22 Feb 1964./

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.29, no.1, 1965, 164-165

TOPIC TAGS: inhomogeneous magnetic field, weak magnetic field, magnetic field measurement, nuclear paramagnetic resonance

ABSTRACT: Difficulties are encountered in stabilizing weak inhomogeneous magnetic fields by the nuclear magnetic resonance method because the inhomogeneity of the field calls for the use of a small transducer, while its weakness requires the use of a large one. These difficulties can in part be obviated by the use of the nuclear magnetic resonance head with a flowing resonating liquid described elsewhere by A.I.Zhernovoy and others (Pribory i tekhnika eksperimenta No.2,115;No.5,73,1958; Inzh.-fiz.zh.1,95,1958; Izv.AN SSSR,Ser.fiz.22,993,1958), for the volume of liquid in the field to be stabilized can be kept small while the volume in the polarizing

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L 32832-65

ACCESSION NR: AP5004542

field, which determines the signal to noise ratio, is made large. A new difficulty arises, however,: the system tends to oscillate because of the time lage between the presence of the working liquid in the stabilized field and its appearance in the polarizing field where the signal is delivered. It is proposed to avoid such oscillation by employing fast negative feedback circuits. A systemsfor stabilizing the magnetic field of a $\pi\sqrt{2}$ spectrometer is described briefly. The proposed feedback circuits are not described. Smooth control of the stabilized field is to be achieved by employing the beat frequency between a variable audio oscillator and a high-frequency crystal-controlled oscillator as the reference frequency for the nuclear magnetic resonance head.

ASSOCIATION: none

SUBMITTED: 00/--Jan65 ENCL: 00 SUB CODE: NP,EM

NR REF SOV: 004 OTHER: 000

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L 44788-65 EWT(l)/EEC(m)/EPF(c)/EPR/EEC(t)/EWA(h) Pi-4/Pl-4/Pc-4/
Pq-4/Ps-4/Peb IJP(c) GG/WW

ACCESSION NR: AP5011063 UR/0115/65/000/003/0054/0056

AUTHOR: Yekaterinin, V. V.; Zhernovoy, A. I.; Stakhov, O. V.

TITLE: Pulse-frequency NMR-flow meter

SOURCE: Izmeritel'naya tekhnika, no. 3, 1965, 54-56

TOPIC TAGS: flow meter, pulse frequency meter, nuclear magnetic resonance, contactless flow meter, liquid flow

ABSTRACT: The authors describe a contactless pulse-frequency flow meter based on the phenomenon of nuclear magnetic resonance and designed to operate on the principle of nuclear magnetic marking. A block-diagram of the device is given in Figure 1 of the Enclosure. The working liquid passes in succession through a polarizer, marker and analyzer. The polarizer is a powerful permanent magnet, in which there is a continuous increase in the sum magnetic moment of the nuclei of the liquid (the liquid is polarized). The marker is an RF coil, wound about the pipeline. The connection of this coil to the generator, tuned to the precession frequency of the nuclei, results in the demagnetization of the system of nuclei (the depolarization of the liquid). The analyzer is a nuclear-resonance flow sensor. The coil of circuit 3 is located in the field of magnet 4 and coupled to the de-

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tector 5. The amplitude of the NMR signal provides information regarding the polarization of the liquid in the sensor. When depolarized liquid is present in the sensor, there is practically no signal; when polarized liquid begins to flow into the analyzer, an NMR signal is developed which is coupled to a shaper circuit where a positive voltage gradient is then produced. This gradient is in turn passed to an electronic key (gate) and connects the generator to the marker, at which moment depolarized liquid begins to flow from the coil. If l_0 is the distance between the marker and the analyzer, and w is the rate of flow of the liquid, then within a time $\Delta t = \frac{l_0}{w}$ this depolarized liquid reaches the analyzer and the nuclear magnetic resonance signal disappears. Meanwhile, in the shaping circuit, a negative voltage gradient develops which, by means of circuit 7, disconnects the generator from the marker, causing the depolarization of the liquid to cease. Within a time period Δt after this, an NMR signal appears and the process is repeated. The repetition frequency $\Omega = \frac{1}{2\Delta t} = \frac{w}{2l_0}$ is proportional to the flow velocity of the liquid. This frequency is transformed, by means of circuit 9, into a DC voltage which is coupled to an arrow-type indicator and recorded. In

L 44283-65

ACCESSION NR: AP5011063

practice, the device consists of two units: a remote sensor unit which is set up directly at the point at which the flow rate is to be measured, and an electronic unit which is connected to the remote unit by means of a 10-meter cable. Further details, technical specifications of components and dimensions are discussed in the article. The device is designed to measure the flow rate of water, acetone, and certain other liquids. The mean-square error, computed on the basis of point deviations from a calibration curve, does not exceed 1%. The test limits of the device run from 0.08 to $1.4 \cdot 10^{-5}$ m^3/sec. This equipment can be used to measure the flow-rates of liquids which provide a nuclear resonance signal and which have a nuclear relaxation time of not less than 0.1 sec. Orig. art. has: 2 figures.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 01 SUB CODE: EC, NP

NO REF SOV: 002 OTHER: 000

Card 3/4

L 44788-65

ACCESSION NR: AP5011063 ENCLOSURE: 01

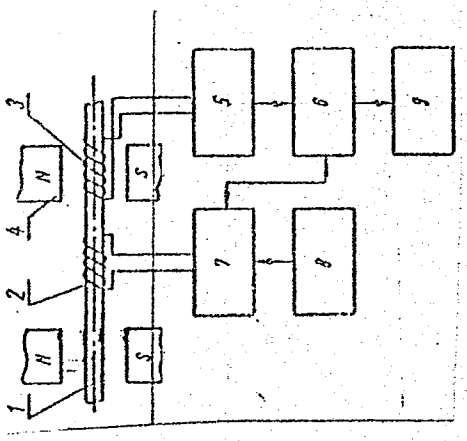

Figure 1. Block diagram of a pulse-frequency NMR flow-meter: 1 - strong permanent magnet, 2 - RF coil, 3 - circuit coil, 4 - magnet, 5 - detector, 6 - shaping circuit, 7 - electronic key (gate), 8 - generator, 9 - circuit for conversion of repetition frequency into DC voltage.

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YEKATERININ, V.V.; ZHERNOVOY, A.I.; STAKHOV, C.V.

The IAMR pulse-frequency flowmeter. Izm. tekh. no.3:54-56 Mr '65.
(MIRA 18:5)